Wei D Lu

List of Publications by Year
in descending order

205 papers	30,581 citations	7069 78 h-index	5663 162 g-index
209 all docs	209 docs citations	209 times ranked	21385 citing authors

#	Article	IF	Citations
1	Nanoscale Memristor Device as Synapse in Neuromorphic Systems. Nano Letters, 2010, 10, 1297-1301.	4.5	3,507
2	Nanoelectronics from the bottom up. Nature Materials, 2007, 6, 841-850.	13.3	1,419
3	Ge/Si nanowire heterostructures as high-performance field-effect transistors. Nature, 2006, 441, 489-493.	13.7	1,401
4	The future of electronics based on memristive systems. Nature Electronics, 2018, 1, 22-29.	13.1	1,369
5	Single-crystal metallic nanowires and metal/semiconductor nanowire heterostructures. Nature, 2004, 430, 61-65.	13.7	957
6	Observation of conducting filament growth in nanoscale resistive memories. Nature Communications, 2012, 3, 732.	5.8	957
7	Short-Term Memory to Long-Term Memory Transition in a Nanoscale Memristor. ACS Nano, 2011, 5, 7669-7676.	7.3	840
8	A Functional Hybrid Memristor Crossbar-Array/CMOS System for Data Storage and Neuromorphic Applications. Nano Letters, 2012, 12, 389-395.	4.5	745
9	Semiconductor nanowires. Journal Physics D: Applied Physics, 2006, 39, R387-R406.	1.3	709
10	Reservoir computing using dynamic memristors for temporal information processing. Nature Communications, 2017, 8, 2204.	5.8	547
11	Controlled deposition of individual single-walled carbon nanotubes on chemically functionalized templates. Chemical Physics Letters, 1999, 303, 125-129.	1.2	516
12	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. Nature Communications, 2014, 5, 4232.	5.8	511
13	Sparse coding with memristor networks. Nature Nanotechnology, 2017, 12, 784-789.	15.6	510
14	High-Density Crossbar Arrays Based on a Si Memristive System. Nano Letters, 2009, 9, 870-874.	4.5	507
15	Experimental Demonstration of a Second-Order Memristor and Its Ability to Biorealistically Implement Synaptic Plasticity. Nano Letters, 2015, 15, 2203-2211.	4.5	473
16	A fully integrated reprogrammable memristorâ€“CMOS system for efficient multiplyâ€“accumulate operations. Nature Electronics, 2019, 2, 290-299.	13.1	469
17	Recommended Methods to Study Resistive Switching Devices. Advanced Electronic Materials, 2019, 5, 1800143.	2.6	452
18	One-dimensional hole gas in germanium/silicon nanowire heterostructures. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10046-10051.	3.3	443

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19	Ionic modulation and ionic coupling effects in MoS2 devices for neuromorphic computing. Nature Materials, 2019, 18, 141-148.	13.3	426
20	Synthesis and Fabrication of High-Performance n-Type Silicon Nanowire Transistors. Advanced Materials, 2004, 16, 1890-1893.	11.1	417
21	CMOS Compatible Nanoscale Nonvolatile Resistance Switching Memory. Nano Letters, 2008, 8, 392-397.	4.5	411
22	Stochastic memristive devices for computing and neuromorphic applications. Nanoscale, 2013, 5, 5872.	2.8	395
23	Comprehensive Physical Model of Dynamic Resistive Switching in an Oxide Memristor. ACS Nano, 2014, 8, 2369-2376.	7.3	388
24	Mechanical Properties of Vaporâ^'Liquidâ^'Solid Synthesized Silicon Nanowires. Nano Letters, 2009, 9, 3934-3939.	4.5	363
25	Biorealistic Implementation of Synaptic Functions with Oxide Memristors through Internal Ionic Dynamics. Advanced Functional Materials, 2015, 25, 4290-4299.	7.8	360
26	Synaptic behaviors and modeling of a metal oxide memristive device. Applied Physics A: Materials Science and Processing, 2011, 102, 857-863.	1.1	355
27	Real-time detection of electron tunnelling in a quantum dot. Nature, 2003, 423, 422-425.	13.7	348
28	Temporal data classification and forecasting using a memristor-based reservoir computing system. Nature Electronics, 2019, 2, 480-487.	13.1	309
29	Nanowire Transistor Performance Limits and Applications. IEEE Transactions on Electron Devices, 2008, 55, 2859-2876.	1.6	306
30	Fully Transparent Thin-Film Transistor Devices Based on SnO2Nanowires. Nano Letters, 2007, 7, 2463-2469.	4.5	285
31	Semiconductor nanowire devices. Nano Today, 2008, 3, 12-22.	6.2	277
32	Programmable Resistance Switching in Nanoscale Two-Terminal Devices. Nano Letters, 2009, 9, 496-500.	4.5	272
33	Iodine Vacancy Redistribution in Organicâ€“Inorganic Halide Perovskite Films and Resistive Switching Effects. Advanced Materials, 2017, 29, 1700527.	11.1	268
34	Nanoscale resistive switching devices: mechanisms and modeling. Nanoscale, 2013, 5, 10076.	2.8	232
35	Si/a-Si Core/Shell Nanowires as Nonvolatile Crossbar Switches. Nano Letters, 2008, 8, 386-391.	4.5	231
36	Memristive technologies for data storage, computation, encryption, and radio-frequency communication. Science, 2022, 376, .	6.0	220

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37	Observation of Conductance Quantization in Oxideâ€Based Resistive Switching Memory. Advanced Materials, 2012, 24, 3941-3946.	11.1	217
38	Optogenetics-Inspired Tunable Synaptic Functions in Memristors. ACS Nano, 2018, 12, 1242-1249.	7.3	205
39	Power-efficient combinatorial optimization using intrinsic noise in memristor Hopfield neural networks. Nature Electronics, 2020, 3, 409-418.	13.1	196
40	Controlled 3D Buckling of Silicon Nanowires for Stretchable Electronics. ACS Nano, 2011, 5, 672-678.	7.3	192
41	Complementary resistive switching in tantalum oxide-based resistive memory devices. Applied Physics Letters, 2012, 100, .	1.5	192
42	MoS₂ Memristors Exhibiting Variable Switching Characteristics toward Biorealistic Synaptic Emulation. ACS Nano, 2018, 12, 9240-9252.	7.3	191
43	Crossbar RRAM Arrays: Selector Device Requirements During Write Operation. IEEE Transactions on Electron Devices, 2014, 61, 2820-2826.	1.6	187
44	High-Performance Transparent Conducting Oxide Nanowires. Nano Letters, 2006, 6, 2909-2915.	4.5	186
45	A general memristor-based partial differential equation solver. Nature Electronics, 2018, 1, 411-420.	13.1	183
46	Crossbar RRAM Arrays: Selector Device Requirements During Read Operation. IEEE Transactions on Electron Devices, 2014, 61, 1369-1376.	1.6	180
47	An Optoelectronic Resistive Switching Memory with Integrated Demodulating and Arithmetic Functions. Advanced Materials, 2015, 27, 2797-2803.	11.1	174
48	Oxide Heterostructure Resistive Memory. Nano Letters, 2013, 13, 2908-2915.	4.5	171
49	Experimental Demonstration of Feature Extraction and Dimensionality Reduction Using Memristor Networks. Nano Letters, 2017, 17, 3113-3118.	4.5	158
50	Dynamical memristors for higher-complexity neuromorphic computing. Nature Reviews Materials, 2022, 7, 575-591.	23.3	155
51	Coherent Single Charge Transport in Molecular-Scale Silicon Nanowires. Nano Letters, 2005, 5, 1143-1146.	4.5	153
52	Onâ€Demand Reconfiguration of Nanomaterials: When Electronics Meets Ionics. Advanced Materials, 2018, 30, 1702770.	11.1	152
53	Nanoscale resistive memory with intrinsic diode characteristics and long endurance. Applied Physics Letters, 2010, 96, .	1.5	144
54	Resistance switching in polycrystalline BiFeO3 thin films. Applied Physics Letters, 2010, 97, .	1.5	139

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55	Memristive Physically Evolving Networks Enabling the Emulation of Heterosynaptic Plasticity. Advanced Materials, 2015, 27, 7720-7727.	11.1	139
56	Tuning Ionic Transport in Memristive Devices by Graphene with Engineered Nanopores. ACS Nano, 2016, 10, 3571-3579.	7.3	139
57	Transparent metallic Sb-doped SnO2 nanowires. Applied Physics Letters, 2007, 90, 222107.	1.5	130
58	Random telegraph noise and resistance switching analysis of oxide based resistive memory. Nanoscale, 2014, 6, 400-404.	2.8	129
59	Nanoscale electrochemistry using dielectric thin films as solid electrolytes. Nanoscale, 2016, 8, 13828-13837.	2.8	126
60	Nanostructured Thin Films Made by Dewetting Method of Layer-By-Layer Assembly. Nano Letters, 2007, 7, 3266-3273.	4.5	118
61	MoS₂ Transistors Fabricated via Plasma-Assisted Nanoprinting of Few-Layer MoS₂ Flakes into Large-Area Arrays. ACS Nano, 2013, 7, 5870-5881.	7.3	114
62	Memristor networks for real-time neural activity analysis. Nature Communications, 2020, 11, 2439.	5.8	108
63	Electrochemical metallization cellsâ€"blending nanoionics into nanoelectronics?. MRS Bulletin, 2012, 37, 124-130.	1.7	107
64	Tuning Resistive Switching Characteristics of Tantalum Oxide Memristors through Si Doping. ACS Nano, 2014, 8, 10262-10269.	7.3	106
65	Transparent, Highâ€Performance Thinâ€Film Transistors with an InGaZnO/Alignedâ€SnO₂â€Nanowire Composite and their Application in Photodetectors. Advanced Materials, 2014, 26, 7399-7404.	11.1	104
66	Branched SnO2 nanowires on metallic nanowire backbones for ethanol sensors application. Applied Physics Letters, 2008, 92, .	1.5	103
67	A Resistance-Switchable and Ferroelectric Metalâ€"Organic Framework. Journal of the American Chemical Society, 2014, 136, 17477-17483.	6.6	103
68	Data Clustering using Memristor Networks. Scientific Reports, 2015, 5, 10492.	1.6	100
69	Dopingâ€Dependent Electrical Characteristics of SnO₂ Nanowires. Small, 2008, 4, 451-454.	5.2	99
70	Strong and Tunable Spinâ^'Orbit Coupling of One-Dimensional Holes in Ge/Si Core/Shell Nanowires. Nano Letters, 2010, 10, 2956-2960.	4.5	99
71	Very Low-Programming-Current RRAM With Self-Rectifying Characteristics. IEEE Electron Device Letters, 2016, 37, 404-407.	2.2	96
72	Building Neuromorphic Circuits with Memristive Devices. IEEE Circuits and Systems Magazine, 2013, 13, 56-73.	2.6	95

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73	Nanoscale resistive switching devices for memory and computing applications. Nano Research, 2020, 13, 1228-1243.	5.8	91
74	Ambipolar inverters using SnO thin-film transistors with balanced electron and hole mobilities. Applied Physics Letters, 2012, 100, .	1.5	90
75	Utilizing multiple state variables to improve the dynamic range of analog switching in a memristor. Applied Physics Letters, 2015, 107, .	1.5	88
76	K-means Data Clustering with Memristor Networks. Nano Letters, 2018, 18, 4447-4453.	4.5	88
77	A Native Stochastic Computing Architecture Enabled by Memristors. IEEE Nanotechnology Magazine, 2014, 13, 283-293.	1.1	85
78	Device and SPICE modeling of RRAM devices. Nanoscale, 2011, 3, 3833.	2.8	84
79	Filamentâ€Free Bulk Resistive Memory Enables Deterministic Analogue Switching. Advanced Materials, 2020, 32, e2003984.	11.1	83
80	Charge Transition of Oxygen Vacancies during Resistive Switching in Oxide-Based RRAM. ACS Applied Materials & Interfaces, 2019, 11, 11579-11586.	4.0	82
81	Efficient in-memory computing architecture based on crossbar arrays. , 2015, , .		81
82	Real-Time Observation of the Electrode-Size-Dependent Evolution Dynamics of the Conducting Filaments in a SiO₂ Layer. ACS Nano, 2017, 11, 4097-4104.	7.3	79
83	Two-terminal resistive switches (memristors) for memory and logic applications. , 2011, , .		77
84	Parasitic Effect Analysis in Memristor-Array-Based Neuromorphic Systems. IEEE Nanotechnology Magazine, 2018, 17, 184-193.	1.1	76
85	Emulation of synaptic metaplasticity in memristors. Nanoscale, 2017, 9, 45-51.	2.8	73
86	Oxide Resistive Memory with Functionalized Graphene as Builtâ€in Selector Element. Advanced Materials, 2014, 26, 3693-3699.	11.1	69
87	Feature Extraction Using Memristor Networks. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 2327-2336.	7.2	62
88	ITO nanowires and nanoparticles for transparent films. MRS Bulletin, 2011, 36, 782-788.	1.7	61
89	Multifunctional Nanoionic Devices Enabling Simultaneous Heterosynaptic Plasticity and Efficient Inâ€Memory Boolean Logic. Advanced Electronic Materials, 2017, 3, 1700032.	2.6	56
90	In Situ Nanoscale Electric Field Control of Magnetism by Nanoionics. Advanced Materials, 2016, 28, 7658-7665.	11.1	52

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91	Near infrared neuromorphic computing via upconversion-mediated optogenetics. Nano Energy, 2020, 67, 104262.	8.2	50
92	Nanoimprint-Assisted Shear Exfoliation (NASE) for Producing Multilayer MoS₂ Structures as Field-Effect Transistor Channel Arrays. ACS Nano, 2015, 9, 8773-8785.	7.3	48
93	Memristive computing devices and applications. Journal of Electroceramics, 2017, 39, 4-20.	0.8	47
94	A Deep Neural Network Accelerator Based on Tiled RRAM Architecture. , 2019, , .		46
95	Adaptive Synaptic Memory via Lithium Ion Modulation in RRAM Devices. Small, 2020, 16, e2003964.	5.2	46
96	Electronic and optical properties of oxygen vacancies in amorphous Ta₂O₅from first principles. Nanoscale, 2017, 9, 1120-1127.	2.8	45
97	Vertical Ge/Si Core/Shell Nanowire Junctionless Transistor. Nano Letters, 2016, 16, 420-426.	4.5	43
98	Retention failure analysis of metal-oxide based resistive memory. Applied Physics Letters, 2014, 105, 113510.	1.5	42
99	Conduction mechanism of a TaO_x-based selector and its application in crossbar memory arrays. Nanoscale, 2015, 7, 4964-4970.	2.8	42
100	Single-Readout High-Density Memristor Crossbar. Scientific Reports, 2016, 6, 18863.	1.6	42
101	Abnormal Multiple Charge Memory States in Exfoliated Few-Layer WSe₂ Transistors. ACS Nano, 2017, 11, 1091-1102.	7.3	42
102	Neuromorphic Computing Using Memristor Crossbar Networks: A Focus on Bio-Inspired Approaches. IEEE Nanotechnology Magazine, 2018, 12, 6-18.	0.9	42
103	Memristive devices for stochastic computing. , 2014, , .		41
104	Nanoionic Resistiveâ€Switching Devices. Advanced Electronic Materials, 2019, 5, 1900184.	2.6	41
105	Memristor-Based Binarized Spiking Neural Networks: Challenges and applications. IEEE Nanotechnology Magazine, 2022, 16, 14-23.	0.9	39
106	Quantitative, Dynamic TaO_x Memristor/Resistive Random Access Memory Model. ACS Applied Electronic Materials, 2020, 2, 701-709.	2.0	38
107	Ge nanowire photodetector with high photoconductive gain epitaxially integrated on Si substrate. Applied Physics Letters, 2017, 110, .	1.5	36
108	Vertical Nanowire Heterojunction Devices Based on a Clean Si/Ge Interface. Nano Letters, 2013, 13, 5521-5527.	4.5	35

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109	Neuromorphic computing with memristive devices. Science China Information Sciences, 2018, 61, 1.	2.7	35
110	Ultralow Sub-1-nA Operating Current Resistive Memory With Intrinsic Non-Linear Characteristics. IEEE Electron Device Letters, 2014, 35, 1239-1241.	2.2	34
111	In Situ Nano-thermomechanical Experiment Reveals Brittle to Ductile Transition in Silicon Nanowires. Nano Letters, 2019, 19, 5327-5334.	4.5	34
112	Progress in the Characterizations and Understanding of Conducting Filaments in Resistive Switching Devices. IEEE Nanotechnology Magazine, 2016, 15, 465-472.	1.1	32
113	Metal/Ion Interactions Induced pâ€“iâ€“n Junction in Methylammonium Lead Triiodide Perovskite Single Crystals. Journal of the American Chemical Society, 2017, 139, 17285-17288.	6.6	32
114	Esaki tunnel diodes based on vertical Si-Ge nanowire heterojunctions. Applied Physics Letters, 2011, 99, .	1.5	31
115	Self-Assembly for Semiconductor Industry. IEEE Transactions on Semiconductor Manufacturing, 2007, 20, 421-431.	1.4	30
116	Electronic properties of tantalum pentoxide polymorphs from first-principles calculations. Applied Physics Letters, 2014, 105, 202108.	1.5	30
117	How to Build a Memristive Integrate-and-Fire Model for Spiking Neuronal Signal Generation. IEEE Transactions on Circuits and Systems I: Regular Papers, 2021, 68, 4837-4850.	3.5	30
118	Field-Programmable Crossbar Array (FPCA) for Reconfigurable Computing. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 698-710.	2.5	28
119	Temporal Learning Using Second-Order Memristors. IEEE Nanotechnology Magazine, 2017, 16, 721-723.	1.1	27
120	Room temperature magnetic exchange coupling in multiferroic BaTiO3/CoFe2O4 magnetoelectric superlattice. Journal of Materials Science, 2009, 44, 5143-5148.	1.7	25
121	Pattern recognition with memristor networks. , 2014, , .		25
122	Hardware Acceleration of Simulated Annealing of Spin Glass by RRAM Crossbar Array. , 2018, , .		25
123	X-ray diffraction and Raman scattering study of SrBi2Ta2O9 ceramics and thin films with Bi3TiNbO9 addition. Applied Physics Letters, 2001, 79, 3827-3829.	1.5	24
124	Radio frequency nanowire resonators and in situ frequency tuning. Applied Physics Letters, 2009, 94, 203104.	1.5	24
125	Si Memristive devices applied to memory and neuromorphic circuits. , 2010, , .		24
126	Going active. Nature Materials, 2013, 12, 93-94.	13.3	23

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127	Spatial confinement of carriers and tunable band structures in InAs/InP-coreâ€“shell nanowires. Chemical Physics Letters, 2010, 495, 261-265.	1.2	22
128	Memristors Based on (Zr, Hf, Nb, Ta, Mo, W) Highâ€Entropy Oxides. Advanced Electronic Materials, 2021, 7, 2001258.	2.6	22
129	Latch-up based bidirectional npn selector for bipolar resistance-change memory. Applied Physics Letters, 2013, 103, .	1.5	21
130	Self-Limited and Forming-Free CBRAM Device With Double Al₂O₃ ALD Layers. IEEE Electron Device Letters, 2018, 39, 1512-1515.	2.2	21
131	Single-electron transistor strongly coupled to an electrostatically defined quantum dot. Applied Physics Letters, 2000, 77, 2746-2748.	1.5	20
132	A Fully Integrated Reprogrammable CMOS-RRAM Compute-in-Memory Coprocessor for Neuromorphic Applications. IEEE Journal on Exploratory Solid-State Computational Devices and Circuits, 2020, 6, 36-44.	1.1	20
133	Memristive Stochastic Computing for Deep Learning Parameter Optimization. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 1650-1654.	2.2	19
134	Interference and memory capacity effects in memristive systems. Applied Physics Letters, 2013, 102, .	1.5	17
135	FPAA/Memristor Hybrid Computing Infrastructure. IEEE Transactions on Circuits and Systems I: Regular Papers, 2015, 62, 906-915.	3.5	17
136	Radio-Frequency Operation of Transparent Nanowire Thin-Film Transistors. IEEE Electron Device Letters, 2009, 30, 730-732.	2.2	15
137	Time-dependency of the threshold voltage in memristive devices. , 2011, , .		15
138	A Crossbar-Based In-Memory Computing Architecture. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4224-4232.	3.5	15
139	Growth and electrical properties of Al-catalyzed Si nanowires. Applied Physics Letters, 2011, 98, .	1.5	14
140	Semiconductor Nanowire Growth and Integration. RSC Smart Materials, 2014, , 1-53.	0.1	14
141	Scaling behavior of nanoimprint and nanoprinting lithography for producing nanostructures of molybdenum disulfide. Microsystems and Nanoengineering, 2017, 3, 17053.	3.4	14
142	Hierarchical architectures in reservoir computing systems. Neuromorphic Computing and Engineering, 2021, 1, 014006.	2.8	14
143	Temporal information encoding in dynamic memristive devices. Applied Physics Letters, 2015, 107, .	1.5	13
144	Device nonideality effects on image reconstruction using memristor arrays. , 2016, , .		12

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145	Device Variation Effects on Neural Network Inference Accuracy in Analog Inâ€Memory Computing Systems. Advanced Intelligent Systems, 2022, 4, 2100199.	3.3	12
146	Dynamic resistive switching devices for neuromorphic computing. Semiconductor Science and Technology, 2022, 37, 024003.	1.0	12
147	Charge transport processes in a superconducting single-electron transistor coupled to a microstrip transmission line. Physical Review B, 2002, 65, .	1.1	11
148	Efficient Si Nanowire Array Transfer via Biâ€Layer Structure Formation Through Metalâ€Assisted Chemical Etching. Advanced Functional Materials, 2014, 24, 1949-1955.	7.8	11
149	A high-speed MIM resistive memory cell with an inherent vanadium selector. Applied Materials Today, 2020, 21, 100848.	2.3	11
150	A Low-Power Variation-Aware Adaptive Write Scheme for Access-Transistor-Free Memristive Memory. ACM Journal on Emerging Technologies in Computing Systems, 2015, 12, 1-18.	1.8	10
151	Stabilization of Mode-Dependent Impulsive Hybrid Systems Driven by DFA With Mixed-Mode Effects. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 1616-1625.	7.2	10
152	Investigating Selectorless Property within Niobium Devices for Storage Applications. ACS Applied Materials & Interfaces, 2022, 14, 2343-2350.	4.0	10
153	Modeling and implementation of oxide memristors for neuromorphic applications. , 2012, , .		9
154	Neural Functional Connectivity Reconstruction with Secondâ€Order Memristor Network. Advanced Intelligent Systems, 2021, 3, 2000276.	3.3	9
155	Organic vapor discrimination with chemiresistor arrays of temperature modulated tin-oxide nanowires and thiolate-monolayer-protected gold nanoparticles. Nanotechnology, 2011, 22, 125501.	1.3	8
156	A Real-Time Retinomorphic Simulator Using a Conductance-Based Discrete Neuronal Network. , 2020, , .		8
157	Memristors and Memristive Devices for Neuromorphic Computing. , 2014, , 129-149.		8
158	Andreev tunneling enhanced by Coulomb oscillations in superconductor-semiconductor hybrid Ge/Si nanowire devices. Physical Review B, 2011, 84, .	1.1	7
159	Tuning Resistive Switching Behavior by Controlling Internal Ionic Dynamics for Biorealistic Implementation of Synaptic Plasticity. Advanced Electronic Materials, 2022, 8, .	2.6	7
160	3-D Vertical Dual-Layer Oxide Memristive Devices. IEEE Transactions on Electron Devices, 2014, 61, 2581-2583.	1.6	6
161	Neural connectivity inference with spike-timing dependent plasticity network. Science China Information Sciences, 2021, 64, 1.	2.7	6
162	Superconducting single-electron transistor coupled to a locally tunable electromagnetic environment. Applied Physics Letters, 2002, 81, 4976-4978.	1.5	5

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163	Electrochemistry at the Nanoscale. Nanoscale, 2016, 8, 13825-13827.	2.8	5
164	RRAM Solutions for Stochastic Computing. , 2019, , 153-164.		5
165	TAICHI: A Tiled Architecture for In-Memory Computing and Heterogeneous Integration. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 559-563.	2.2	5
166	Memristive Devices: Switching Effects, Modeling, and Applications. , 2014, , 195-221.		4
167	Defect consideratons for robust sparse coding using memristor arrays. , 2015, , .		4
168	Feature extraction and analysis using memristor networks. , 2018, , .		4
169	Device Non-Ideality Effects and Architecture-Aware Training in RRAM In-Memory Computing Modules. , 2021, , .		4
170	Nanowire based electronics: Challenges and prospects. , 2009, , .		3
171	CMOS-integrated memristors for neuromorphic architectures. , 2011, , .		3
172	Memristive analog arithmetic within cellular arrays. , 2012, , .		3
173	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2018, , .		3
174	Versatile Metal Oxide Nanowire Devices Achieved via Controlled Doping. Materials Research Society Symposia Proceedings, 2007, 1018, 1.	0.1	2
175	Improvement of RRAM Device Performance Through On-Chip Resistors. Materials Research Society Symposia Proceedings, 2012, 1430, 149.	0.1	2
176	High Performance, Low Power Nanowire Transistor Devices. RSC Smart Materials, 2014, , 54-110.	0.1	2
177	Analog signal processing on a FPAA/memristor hybrid circuit. , 2014, , .		2
178	Formation of Self-Connected Si0.8Ge0.2 Lateral Nanowires and Pyramids on Rib-Patterned Si(1 1 10) Substrate. Nanoscale Research Letters, 2017, 12, 70.	3.1	2
179	Hybrid neural network using binary RRAM devices. , 2017, , .		2
180	Epsilon-greedy strategy for online dictionary learning with realistic memristor array constraints. , 2017, , .		2

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181	Vector multiplications using memristive devices and applications thereof. , 2020, , 221-254.		2
182	Deep Neural Network Mapping and Performance Analysis on Tiled RRAM Architecture. , 2020, , .		2
183	Memristors and Memristive Devices forÂNeuromorphic Computing. , 2019, , 369-389.		2
184	Physical Unclonable Function Systems Based on Pattern Transfer of Fingerprint-Like Patterns. IEEE Electron Device Letters, 2022, 43, 655-658.	2.2	2
185	Nonvolatile Resistive Switching Devices Based on Nanoscale Metal/Amorphous Silicon/Crystalline Silicon Junctions. Materials Research Society Symposia Proceedings, 2007, 997, 1.	0.1	1
186	Ultrafast Optical-Pump Terahertz-Probe Spectroscopy of Oriented Ge and Ge/Si Core/Shell Nanowires. , 2011, , .		1
187	Post-Annealing Treatments and Interface Effects on Anomalous Magnetic Characteristics of HfOx Film. Integrated Ferroelectrics, 2013, 141, 145-153.	0.3	1
188	Periodic Orbits Analysis in a Class of Planar LiÃ©nard Systems with State-Triggered Jumps. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650153.	0.7	1
189	Perovskite Films: Iodine Vacancy Redistribution in Organicâ€“Inorganic Halide Perovskite Films and Resistive Switching Effects (Adv. Mater. 29/2017). Advanced Materials, 2017, 29, .	11.1	1
190	RRAM fabric for neuromorphic and reconfigurable compute-in-memory systems. , 2019, , .		1
191	Memory Devices: Filamentâ€Free Bulk Resistive Memory Enables Deterministic Analogue Switching (Adv.) Tj ETQq1 1 0.784314 rgBT /O	11.1	1
192	Kinetic Monte Carlo Simulation of Lithium Dendrite Growth in Lithium-ion Battery. , 2021, , .		1
193	Observation of conducting filament growth in nanoscale resistive memories. , 0, .		1
194	Hierarchical 3D Nanostructure Organization for Next-Generation Devices. , 2011, , 205-248.		1
195	Real-time electron counting in semiconductor nanostructures. , 2005, , .		0
196	Real-time electron counting studies on charge fluctuations in a semiconductor quantum dot (Invited) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		0
197	Si-based two-terminal resistive switching nonvolatile memory. , 2008, , .		0
198	Nanowire-Based High Speed Transparent and Flexible Thin-Film Transistor Devices. , 2008, , .		0

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199	Megahertz frequency characterization of transparent nanowire-based thin-film transistors. , 2009, , .		0
200	Photoelectric characteristics of Schottky diode based on a Ge/Si core/shell nanowire. , 2015, , .		0
201	Switching Memory: An Optoelectronic Resistive Switching Memory with Integrated Demodulating and Arithmetic Functions (Adv. Mater. 17/2015). Advanced Materials, 2015, 27, 2812-2812.	11.1	0
202	Guest Editorial Solid-state Memristive Devices and Systems. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 121-122.	2.7	0
203	Characterizations and understanding of conducting filaments in resistive switching devices. , 2015, , .		0
204	In-situ Observation of Cu Filaments Evolution in SiO2 layer. Microscopy and Microanalysis, 2017, 23, 1622-1623.	0.2	0
205	Memristive Computing Devices and Applications. Kluwer International Series in Electronic Materials: Science and Technology, 2022, , 5-32.	0.3	0